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ABSTRACT

An investigation was conducted of socioeconomic differences in the cognitive style and content of mother/child interaction, through the use of a task in which mothers attempted to get their children to point to the target item in an array of four pictures. Subjects were 32 mother/child dyads, half black and half white. Within each ethnic group, half of the subjects were from professional class families and the other half from nonprofessional class families. The children in the sample were between four and a half and five years old and attended nursery school. All of the children in the study performed at the same high level of proficiency--98% or above. The primary focus of this study was therefore the mothers' talk--characterizing its semantic content, structural complexity, and pragmatic function, and discovering the variety of techniques and verbal strategies the mothers used to accomplish their task. Three general categories were noted: verbal relations, visual relations, and pragmatic relations. Findings indicated that social class was by far the most frequent main effect and that there were no significant differences between racial groups. The finding that working-class mothers used more requests for action and imperatives than professional-class mothers corroborates similar findings in other research. Unexpectedly, professional-class mothers used significantly more functional definitions than did the working-class mothers. (MKM)

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Technical Report No. 161

LEXICAL SHARING IN MOTHER-CHILD INTERACTION

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Lexical Sharing in Mother-Child Interaction

One of the central theoretical issues in developmental research is what effects early experience in the home may have on the socialization of linguistic and cognitive modes in children. This issue has been articulated with great force by Bernstein (1972) and extended in work such as that done by Hess and Shipman (1965). This line of research presents a view of socialization in which the structure of the social system, and of the family in particular, shape communication modes, which are manifested in linguistic structures and functions. Language in turn shapes thought and styles of problem solving.

A good bit of research in child development appears to support the claim that mother-child or adult-child interaction is a primary context for within-family socialization of language. The literature on this topic has focused largely on structure (cf. Drach, Kobashigawa, Pfuderer, & Slobin, 1969; Newport, Gleitman, & Gleitman, 1977; Phillips, 1973; and Snow, 1972). In their influential study, however, Hess and Shipman (1965), in addition to measuring indices of language structure (e.g., syntactic complexity), also investigated class differences in the content of mother-child interaction. Taking as their starting point Bernstein's distinction between restricted and elaborated codes, they examined different modes of communication that mothers from various socioeconomic levels use with their children. One measure of cognitive style used was the preferred strategies of categorization in the Sigel Sorting Task. One finding was

that middle-class mothers scored higher than working-class mothers in their use of descriptive and categorical classification; the reverse was true for relational classification.

The present research expands on this investigation of socioeconomic differences in the cognitive style and content of mother-child interaction, through the use of a task in which mothers attempt to get their children to point to the target item in an array of four pictures.

Description of the Study

Subjects

Subjects were thirty-two mother-child dyads from a pool of subjects participating in a larger study on the function and use of language. Half were Black and the other half were White. Within each ethnic group, half of the subjects were from professional families and the other half from nonprofessional families. Professional and nonprofessional status were determined by using a version of the scale developed for this purpose by Warner, Meeker, and Eels (1949). The children in the sample were between the ages of 4½ and 5 years and attended nursery school.

Task

The stimulus materials for the task were the first 50 sets of pictures from the Peabody Picture Vocabulary Test (PPVT). In the normal use of the PPVT, the child indicates its knowledge of a vocabulary item by pointing to the picture in an array of four that corresponds to that item.

In this study, both mothers and children were given copies of the PPVT test booklet. Rather than using the vocabulary items predetermined by the testmaker, the mother's copy of the test booklet simply contained a check mark indicating the target picture. Mothers were instructed to say whatever they thought appropriate about the target item to get the child to point to the picture of it in his/her copy of the test booklet; they did not have access to the testmaker's label for the items.

Consequently, the mothers' talk varied widely in content, structure, length, function, and style. It ranged from simply labeling the target picture (often coincidentally, using the tester's label) to giving indirect hints about the item. Their talk also ranged from simple noun phrases to quite elaborate syntactic-semantic structures, from one-word prompts to several sentences, from describing the picture to commanding the child to point, and from giving highly personal to quite conventional information.

A female experimenter went over the following instructions with the mothers; the mothers were to use these instructions in explaining the task to the children:

> I want to play a picture game with you. See all the pictures on this page. I will say a word, then I want you to put your finger on the picture of the word I have said. Let us try one. Put your finger on the picture for "bed."

After a response, the following was said:

> That's fine. Now put your finger on "fish." Good! Show me "butterfly." Fine! Now I am going to show you some other pictures. Each time I say a word, you find the picture of it. When we get along further in the book you may not be sure you know the word, but I want you to look carefully at all of the pictures anyway and choose the one you think is right.

How the mothers were to interpret these instructions was left open deliberately so that they could decide how best to structure their verbal information to the children. The mothers from the four socioeconomic/racial groups asked about the same number of questions concerning the instructions. When the experimenter was sure that the adults understood the instructions, the task was begun. A record of the accuracy of the children's performance was kept by the female experimenter who was present. All of the adults' talk was recorded. Data analysis was done from transcribed protocols.

The Coding System

All of the children in our study performed at the same high level--98% proficiency or above. The primary focus of this study is therefore the mothers' talk--characterizing its semantic content, structural complexity, and pragmatic function, and discovering the variety of techniques and verbal strategies the mothers used to accomplish their task.

We will first describe the system of coding developed for this purpose, and then give the results of applying it to the corpus of talk produced by the mothers.

Primary Dimensions

The mothers' talk was segmented into verbal units called prompts, the basic unit of the coding system. A prompt consists of a single utterance by the mother, representing information to be used by the child in selecting the appropriate picture-item. Formally, a prompt consists of an independent

main clause (but not more than one), or any part of one--a single word (e.g., a label like "snake"), a simple noun phrase ("the long thing") or a more complex noun phrase containing a relative clause ("the long thing that crawls on the ground"), or a more or less complete main clause (as in turns like "Point to the . . . ah . . . I'm looking at a long snake," which includes a false start, an informative prompt, and a repetition). False starts and repetitions do not count as additional prompts. Nor does re-encoded information, e.g., "I am looking at two men and they look like they are fighting."

We have employed a formal, rather than a content, definition of prompt for this coding. A single prompt such as "there is a long snake crawling on the ground" might contain several parts (e.g., "long," "snake," and "crawling on the ground") each of which might alone have constituted sufficient information for choosing the correct target picture.

Three general categories were developed to characterize the relations between prompts and the properties of the pictures. The categories were: (a) relations between mothers' prompt and the testmaker's label for the picture ("verbal relations"); (b) relations between prompt and the visual properties of the pictured target item ("visual relations"); and (c) pragmatic or "general-knowledge-of-the-world" relations between a prompt and a picture ("pragmatic relations").

Verbal relations. Verbal relations are relations that hold between the testmaker's label (T-label) and the mother's prompt.

Mothers did not have access to the T-label during the experiment. It was assumed, however, for the purpose of coding that the T-label identifies the primary conceptual content of the target picture. Therefore, if a mother used in her prompt either the T-label itself, or some word or words having a definable semantic relationship with the T-label, she would be considered to have used a semantically conceptual-based strategy in formulating the prompt.

Verbal relations are divided into the following subcategories, on the basis of the type of relationship between the T-label and the prompt:

(1) "Identical": The T-label appears in the prompt.

(2) "Semantic Relations": The prompt is semantically superordinate, subordinate, coordinate, or synonymous to the T-label.[1]

(3) "Functional Definition": The T-label is functionally defined in the mother's prompt.[2]

(4) "Other": There is a definite verbal (semantic) relation between the T-label and the prompt, but it does not fall into the above categories.

(5) "None": There is no verbal relation betwen the prompt and the T-label.

Visual relations. Visual relations are relations that hold between the prompt and the picture, where any relation to the T-label (that is, any verbal relation) is redundant or incidental to the visual relation. Prompts in this category indicate a focus by the mother on the visual information in the picture. When determining if a mother's prompt should be coded in this category the following questions were asked:

1. Does the prompt label the picture? The attribution of a label to the picture can be done in three ways. First, the whole scene can be labeled (e.g., "it's a curled-up snake"). Second, a central feature that captures the entire picture can be labeled (e.g., "a man in a uniform"). Third, a succinct label might be given, which was different from the T-label. For instance, the T-label for the picture of a thermometer was "temperature," but mothers almost always gave the succinct label "thermometer."

2. Does the prompt provide a global description of the picture? Here the description incorporates more than one feature in specifying the target picture. For example, "seal with a ball" was a prompt for a picture with the T-label "balancing," and "girl looking at a flag" was a prompt for a picture with the T-label "pledging." (A picture label, on the other hand, characterizes the entire picture by using a single visual feature that is central to that picture.)

3. Does the prompt reflect the use of a peripheral feature? Here, only a minor feature or part of the pictured item is mentioned; for example, "I see a boat" as a prompt for an item labeled by the testmaker as "river."

Pragmatic relations. Pragmatic relations concern general-knowledge-of-the-world relations between prompts and pictures. This class can be divided into three major subcategories:

First there are functional relations, which include the use of any aspect of the picture which does not involve explicit reference to any perceivable feature of the picture, and which does not fall into the Verbal Relations category. When coding for functional relations we asked: Does the

prompt contain information that reflects a use in the real world that is not explicitly perceivable in the picture item? For example, "boys and girls can play with it" and "she is playing with something" were prompts for a seal balancing a ball.

Another category of pragmatic relations is personal reference, i.e., a reference to knowledge which is idiosyncratic to the mother-child dyad. When coding for personal reference we asked: Does the prompt focus on information particular to the mother-child dyad's experience? For example, "What did I give you 17¢ to buy" was given as a prompt for the item "ice cream." We also placed in this category references to a person's particular attributes or possessions, such as "Like daddy has on his car" as a prompt for "tire."

The final category of pragmatic relations is called general associations. Prompts coded in this category refer to non-perceivable aspects of the pictured item, but not to personal or functional aspects. When coding prompts in this category we asked the question: Does the prompt refer to some non-perceivable feature that has some "real-world" association with the target item? For example, "it goes on a car" for the item "tire," and "it's shiny" for the item "ring."

Prompts that could not be coded into any of the categories we have listed above are designated other. For instance, "This is an umbrella" for the item "cobweb," and "something that is filled" for the item "river."

Additional Codes

In addition to coding along the primary dimensions, we coded for a number of other aspects of mothers' talk. First, we coded what we called the mode of the prompt according to the type of "speech act" used by the mother. The set of speech acts used were from a taxonomy developed by Dore (1977a, 1977b). There were two primary types of acts in this corpus of utterances: Requestives (questions and requests) and Assertives (assertions, descriptions, statements).

In the category of Requisitves, three subtypes appeared: choice questions (formally of the "yes-no" or "either-or" type) which are conventionally responded to with one of two possible choices; product questions (of the "wh-information" or "fill-in-the-blank" type) which in conversation typically receive answers about "what," "who," "where," etc.; and requests for action or RQACs (commands or imperatives) which seek the performance of some action by the hearer. In the category of Assertives, three subtypes also appeared: identifications, which identify some object or event; descriptions, or ASDCs, which describe some property of an object or event; and explanations, which state reasons, causes, or justifications. Assertives covered from 80% to 96% of the prompts used by the mothers in this study (the percentage varying with ethnic group membership and socioeconomic class), and we need not discuss the remaining few act types. See Table 1 for the array of C-act ("conversational act") types found in the everyday speech of these children with their mothers.

Insert Table 1 about here.

A final code concerned the number of "informative" words in a prompt versus the number of "framing" words or prefacing words used. As noted above, prompts were segmented and coded on the basis of new information which could serve as a basis for selecting the target item. However, much of what the mothers said provided no such information. The informative words of a prompt were often prefaced with "framing" words that most often merely oriented the child to the nature of the task at Mand. Prompts of this type would begin with "Point to the . . ." or "I am looking at a . . . " or "Now tell me where the _____ is," none of which direct the child to differences among alternatives. We counted "informative" vs. "framing" words for each prompt, as indicated by the examples just cited.

Results

Primary Dimensions

The basic unit for analysis in this study was the mothers' prompts. These were submitted to an analysis of variance with two between-subject variables (Race: Black or White; and Class: Professional or Working) and a repeated measure: Easy or Hard items. Altogether 20 items per mother-child pair were chosen for analysis.[3] The prompts were coded by two trained coders. The reliability between the two coders was .90. The data were first analyzed along our primary dimensions, verbal, visual, and pragmatic, and then analyzed for the type of speech acts used by mothers and the informativeness of the prompts. We shall present these results in terms of main effects and interactions.

A summary of the results is given in Tables 2 and 3.

Insert Tables 2 and 3 about here.

Verbal relations. Among the prompts coded as verbal, main effects were found for social class and for level of item difficulty; no significant interactions were found.

The main effects for social class were on the variables Functional Definitions and Other. Professional-class mothers used more functional definitions and prompts coded Other than did working-class mothers. Contrary to what the literature would predict, working-class mothers rarely used functional definitions. Black profesional-class mothers used the greatest number of functional definitions. Black working-class mothers gave no responses that could be classified as Other.

In the case of level of item difficulty, there were no differences in performance along social class or racial group membership lines. All subjects involved used more semantic relations on hard items than on easy ones. (White mothers do this slightly more than Black ones, although this difference is not significant.) The None (no verbal relation) variable showed a similar pattern: More difficult items produced a greater number of responses in this category. There were no significant differences in the None variable by race or social class. It must be noted, though, that for Black professional-class mothers there was little of the variation in

the None variable between hard and easy items that was characteristic of the group of subjects as a whole.

Visual relations. The findings for the visual dimension are not so straight-forward.

For the picture label variable, the working-class group scored higher than the professional class at both levels of item difficulty. Whites used slightly more picture labels than Blacks. In addition, there was a race x class x difficulty interaction. The level of difficulty results are mixed. For Black profesional-class and White working-class mothers, hard items evoked more picture labels than easy items. For Black working-class and White professional-class mothers, the difference was in the opposite direction.

Unlike picture labels, the use of global descriptions in prompts was related only to social class. Among both Black and White subjects, members of the professional class used more of these than did members of the working class. Although not enough to be statistically significant, Blacks used more global descriptions than Whites.

Another visual sub-dimension for which significant differences were found was peripheral features. There was a main effect for difficulty: All mothers used peripheral features more often on hard items, except for the Black professional-class mothers, who used the same number on hard and easy items.

There was also a race x class interaction. Among Black mothers, the professional-class group used more peripheral features than did the working-class. The opposite was true for White mothers.

Additional Codes

Conversational acts. In addition to the categories discussed above, the data were coded for conversational acts and informativeness. A description of the use of the coding scheme for conversational acts (C-acts) can be found in Cole, Dore, Hall, and Dowley (1978) and in Hall and Cole (1978).

Main effects for social class were found for two C-act types: RQACs (requests for action) and ASDCs (descriptions). RQACs command or direct someone to accomplish some act. Working-class mothers used a greater number of RQACs than did the professional-class mothers. ASDCs on the other hand assert information about some event or object. Professional-class mothers used these more often than did working-class mothers. There was also a race x social class interaction for ASDCs: the class difference was more pronounced among Black subjects than among White subjects.

Informativeness. Prompts were divided into framing words (e.g., "now let me see" or "point to the . . . ") and information words (i.e., words providing information that could be used to select the correct picture). Using frequency of occurrence as a measure, a significant class difference was found in the use of framing words: working-class mothers used more framing words than did professional-class mothers. No statistically significant differences were found for information words.

Discussion

We have been concerned in this paper with the way mothers talk to their children in a particular cognitive task--with the content, structural complexity, pragmatic functions, and verb strategies of the mothers' speech. Differences in these factors reflect differences in the socialization practices of the family, which, according to Bernstein (1973), Cook-Gumperz (1973), and others, strongly influence a child's social learning and development of cognitive strategies.

According to Berstein, Cook-Gumperz, and others, differences in socialization practices correlate significantly with social class distinctions. In our findings too, social class differences appeared in all the basic categories of dimensions used in coding the data except for the Pragmatic Relations category, in which no variable showed significant variation. The variables showing main effects for social class were Functional Definitions, Semantic Relations, and Other in the Verbal Relations category; Picture Label and Global Description in the Visual Relations category; and RQACs, ASDCs, and Framing Words in the Additional Coding categories.

Social class was by far the most frequent main effect. It is also of interest to note that there were no significant differences between racial groups: Where racial effects entered into our findings, they were in interaction with social class or item difficulty.

Next, we want to compare the content of the social class differences in our findings with the differences noted in earlier research. In some

cases, there is complete agreement. For example, our finding that working-class mothers use more RQACs (requests for action, imperatives) than professional-class mothers, while the latter use more ASDCs (descriptions), corroborates similar findings in other research. To evaluate our findings relative to the other categories of prompts, we will want to look in more detail at the findings of Rosch (1977) and Hess and Shipman (1965), the research which is most directly comparable with ours.

Comparison with the Findings of Rosch

The research reported in Rosch (1977) involves a task very similar to the one used here, but with pictures of a somewhat different nature. In Rosch's experiment, ten year olds from different socioeconomic and racial backgrounds were asked to give information that would enable a decoder of the same age to choose the target item from an array of pictures. In this case the pictures were either abstract figures or Frois-Wittman faces.

Rosch's coding dimensions were Whole vs. Part and Descriptive vs. Inferential. Whole means that the whole figure or face is described; Part codes a reference to some part of the figure or face. Descriptive codes responses that refer to the visual properties of the stimulus; Inferential codes responses that go beyond the visual properties. Rosch found clear-cut class differences: Middle-class subjects preferred Part-Descriptive responses, while lower-class subjects preferred Whole-Inferential.

(The abstract figures were ones which had been previously found to elicit low agreement in what they were named. Thus, they did not lend

themselves to Whole-Descriptive responses; there were in fact almost no Whole-Descriptive responses in Rosch's results. There were also very few Part-Inferential responses.)

The category Descriptive corresponds to our Visual Relations. Part-Descriptive would correspond most closely with our categories Global Descriptions and Peripheral Features. (Global Descriptions are defined as making reference to more than one part of a picture.) Peripheral Features were used only rarely by our subjects, and no significant differences were found. In the case of Global Descriptions, however, there was a main effect for social class, the professional-class subjects using more of these. Therefore, in this category, our findings replicate those of Rosch.

Our Picture Label category would correspond most closely to Whole-Descriptive, a type of response not found in Rosch's data because of the nature of her stimulus materials.

Rosch's Whole-Inferential category would correspond with our non-Visual categories, Pragmatic Relations and Verbal Relations (and of the latter, especially the Functional Definitions subcomponent). In this case Rosch's findings are not replicated; there is no clear social class differences in our non-visual categories, overall; and in the Functional Definitions subclass of the Verbal Relations category, there is a significant class difference in the opposite direction--professional-class mothers used more functional definitions than did working-class mothers.

Comparison with the Findings of Hess and Shipman

Hess and Shipman (1965) measured the cognitive style of mothers and children from different socioeconomic backgrounds in terms of preferences in modes of categorization on a sorting task. The materials are very similar--simple line drawings--but the tasks are different, although related. In the sorting tasks, the subject must identify some attribute or information in a picture which it shares with other members of a group, and which differentiates it from non-members. In our task, the subject had only to find an attribute or information which would distinguish the target picture from the other three.

The responses of their subjects fell into four categories: descriptive part-whole, descriptive global, relational-contextual, and categorical inferential.

Descriptive responses are direct references to physical attributes of the stimuli. Thus, their Description variable corresponds with our Visual Relations. Descriptive Global would correspond most closely with our Picture Label.

Our findings for the Global Description variable (their Descriptive Part-Whole) replicated theirs: Middle-class subjects had more responses in this category than did working-class subjects. However, in our results, working-class subjects used more picture labels than did professional-class subjects, whereas Hess and Shipman got the opposite result for their corresponding Descriptive Global variable.

Taking the Descriptive category as a whole, Hess and Shipman found the middle-class subjects to use more Descriptive responses; in our data, however, taking the Visual Relations category as a whole, the working-class subjects have a slightly higher mean.

Relational-Contextuals are responses which group stimuli in terms of their relation to each other. For example, pictures of a man, a woman, and a child might be grouped together not because they share any properties, but because together they form a family. Similarly, a man holding a gun and a man lying on the ground might be grouped together as a pair, i.e., murderer and victim.

This category does not correspond directly to any of our variables, because the picture identification task we used does not allow for this strategy the way a sorting task does. However, certain aspects of relational responses might be relevant. They usually have shorter reaction times, indicating less reflection and evaluation of alternative items. Moreover, relationals are often subjective, reflecting a tendency to relate objects to personal concerns, in contrast with the descriptive and categorical responses, which tend to be objective and detached, more general, and more abstract.

Among our categories, the Pragmatic Relations (especially Personal Reference) would tend to be the most subjective and personal. However, while Hess and Shipman (1965) found lower-class mothers using more relational-contextual responses than middle-class mothers, we found no consistant class differences among Pragmatic Relations.

Categorical-Inferentials refer to non-observable characteristics of the stimuli; for example, "all of these people work for a living." They differ from Relational-Contextuals in that each stimulus is an independent representative of the concept involved. Categorical-Inferentials are the most abstract of the three categories; according to Hess and Shipman, "they represent thought processes that are more orderly and complex in organizing stimuli, suggesting more efficient strategies of information processing"(p. 879). Hess and Shipman found a class difference in the use of responses in this class favoring the middle-class.

Among our variables, the most abstract and conceptually-based would be Verbal Relations, particularly the subcategory Semantic Relations. However, in our data, there are more Semantic Relations responses by working-class mothers; the difference is almost statistically significant.

In summary, there is one area of clear agreement: Middle-class subjects are more likely to use descriptive (visually oriented) information referring to a part or parts of a picture than are working-class subjects. It is not clear, though, whether this is due to a middle-class preference for a visual orientation (an interpretation supported by Hess and Shipman's results but not ours), a middle-class preference towards an analytic orientation, or some combination of these. Rosch's experimental design is appropriate for distinguishing between these two factors, but her stimulus materials were not.

In other areas, there is no real agreement between the results of the different experiments. This is due in part, but not completely, to a lack of correspondence between the coding categories.

Finally, one more aspect of our results deserves further comment: the variables Functional Definitions and Functional Relations. In the case of Functional Definitions, there was a distinct class difference; unexpectedly professional-class mothers used significantly more functional definitions than did the working-class mothers. In the case of Functional Relations, Black working-class mothers used a large number of these on hard items (but none on easy items; the distribution in the remaining cells was such that none of the differences were statistically significant).

This indicates that some aspect of the difference between Functional Definitions and Functional Relations is crucially involved in a class-based difference in verbal strategies. Previous research might suggest that the important factor is the following: Functional Definitions, as opposed to other functional relations, are conventionalized, and hence objective and general. However, the lack of any class-based difference in the Personal Reference variable of the Pragmatic category means that our data gives no support to the hypothesis that working-class mothers would use more personal and subjective prompts.

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Footnotes

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[1] Superordinates include the prompt "animal" for the T-label "snake," "jewelry" for "ring." Subordinates include "coins" for "cash." Coordinates include "dolphin" or "porpoises" for "whale," "coat" for "jacket." Synonyms include "fussing" for "argument," "money" for "cash," etc.

[2] Prompts coded as Functional Definitions were also recorded as Functional Relations under our Pragmatic category. However, there are grounds for coding some of them as verbal relations as well. A functionally based prompt is coded as a functional definition if it includes information that is an essential part of the definition of the associated T-label. While some words (e.g., liquid or sphere) can be defined purely in terms of physical characteristics, others necessarily include in their meaning a specification of use or function. In our data, for example, most prompts for the T-label "ladder" contain the term "climb"--e.g., "what you climb on," "what you use to climb up with," and so on. Most dictionary definitions of "ladder" will also presumably make some reference to climbing. Therefore, the relationship between the T-label "ladder" and the prompt "climb," while it is functional, is also conventional, and reflects part of the semantic structure

of the T-label. (As a practical coding criterion, we coded a functionally-based prompt as a Functional Definition if the information in the mother's prompt (or a strict semantic equivalent to that information) was found in the dictionary definition of the T-label, according to Webster's Third International Dictionary.)

[3]Although the number of items was held constant, the number of prompts per mother-child pair will vary, since mothers sometimes needed to use more than one prompt to get the child to choose a picture.

[4]We wish to thank William Nagy of the Center for the Study of Reading for several suggestions and revisions which have been incorporated into the final version of this paper.

Table 1

Codes, Definitions, and Examples of Conversational Acts.

Code	Definition and Example
	Requestives solicit information or actions.
RQCH	Choice Questions seek either-or judgments relative to propositions: "Is this an apple?"; "Is it red or green?"; "Okay?"; "Right?".
RQPR	Product Questions seek information relative to most "WH" interrogative pronouns: "Where's John?"; "What happened?"; "Who?"; "When?".
RQPC	Process Questions seek extended descriptions or explanations: "Why did he go?"; "How did it happen?"; "What about him?"
RQAC	Action Requests seek the performance of an action by hearer: "Give me it!"; "Put the toy down!"
RQPM	Permission Requests seek permission to perform an action: "May I go?"
RQSU	Suggestions recommend the performance of an action by hearer or speaker both: "Let's do it!"; "Why don't you do it?"; "You should do it."
	Assertives report facts, state rules, convey attitudes, etc.
ASID	Identifications label objects, events, people, etc.: "That's a car."; "I'm Robin."; "We have a boat."
ASDC	Descriptions predicate events, properties, locations, etc. of objects or people: "The car is red."; "It fell on the floor."; "We did it."
ASIR	Internal Reports express emotions, sensations, intents, and other mental events: "I like it."; "It hurts."; "I'll do it."; "I know."
ASEV	Evaluations express personal judgments or attitudes: "That's good."
ASAT	Attributions report beliefs about another's internal state: "He does not know the answer."; "He wants to."; "He can't do it."
ASRU	Rules state procedures, definitions, "social rules," etc.: "It goes in here."; "We don't fight in school."; "That happens later."
ASEX	Explanations state reasons, causes, justifications, and predictions: "I did it because it's fun."; "It won't stay up there."

Table 1 Cont'd

Performatives accomplish acts (and establish facts) by being said.

PFCL Claims establish rights for speaker: "That's mine."; "I'm first."

PFJO Jokes cause humorous effect by stating incongruous information, usually patently false: "We throwed the soup in the ceiling."

PFTE Teases annoy, taunt, or playfully provoke a hearer: "You can't get me."

PFPR Protests express objections to hearer's behavior: "Stop!"; "No!"

PFWA Warnings alert hearer of impending harm: "Watch out!"; "Be careful!"

Responsives supply solicited information or acknowledge remarks.

RSCH Choice Answers provide solicted judgments of propositions: "Yes."

RSPR Product Answers provide Wh-information: "John's here."; "It fell."

RSPC Process Answers provide solicited explanations, etc.: "I wanted to."

RSCO Compliances express acceptance, denial, or acknowledgement of requests: "Okay."; "Yes."; "I'll do it."

RSCL Clarification Responses provide solicited confirmations: "I said no."

RSQL Qualifications provide unsolicited information to requestive: "But I didn't do it."; "This is not an apple."

RSAG Agreements agree or disagree with prior non-requestive act: "No, it is not."; "I don't think you're right."

RSAK Acknowledgments recognize prior non-requestives: "Oh."; "Yeah."

Regulatives control personal contact and conversational flow.

ODAG Attention Getters solicit attention: "Hey!"; "John!"; "Look!"

ODSS Speaker Selections label speaker of next turn: "John"; "You."

ODRQ Rhetorical Questions seek acknowledgement to continue: "Know what?"

ODCQ Clarification Questions seek clarification of prior remark: "What?"

Table 1 Cont'd

ODBM Boundary Markers indicate openings, closings and shifts in the conversation: "Hi!"; "Bye!"; "Okay"; "All right"; "By the way."

ODPM Politeness Markers indicate ostensible politeness: "Please"; "Thank you."

Expressives non-propositionally convey attitudes or repeat others.

EXCL Exclamations express surprise, delight, or other attitudes: "Oh!" "Wow!"

EXAC Accompaniments maintain contact by supplying information redundant with respect to some contextual feature: "Here you are"; "There you go."

EXRP Repetitions repeat prior utterances.

Miscellaneous Codes

UNTP Uninterpretables for uncodable utterances.

NOAN No Answers to questions, after 2 seconds of silence by addressee.

NVRS Non-verbal Responses for silent compliances and other gestures.

Table 2

Average Performance Scores on Codes for the Primary Dimension for Two Racial Groups and Two Social Groups

Code	Item Level	Race and Social Class Group			
		Black Professional	Black Working	White Professional	White Working
Functional	Easy	3.06	-	1.00	.50
Definitions	Hard	2.56	.50	1.06	.63
Semantic	Easy	1.15	1.31	1.25	1.40
Relations	Hard	2.69	4.06	3.06	4.00
Other	Easy	.38	-	.06	.13
	Hard	.56	-	.50	.12
None	Easy	4.00	.63	1.31	1.31
	Hard	4.50	3.63	3.19	3.19
Picture	Easy	4.63	9.63	7.75	6.90
Label	Hard	5.81	7.86	6.19	8.69
Global	Easy	1.63	.63	.69	.49
Description	Hard	1.06	1.19	1.50	.69
Peripheral	Easy	1.13	-	.25	.56
Feature	Hard	1.13	1.00	.50	1.25

Table 3

Average Performance Scores on Codes from the Primary Dimension for Two Racial Groups and Two Social Groups

Code	Item Level	Race and Social Class Group			
		Black Professional	Black Working	White Professional	White Working
RQAC	Easy	.75	.50	2.63	5.75
	Hard	.13	5.13	2.25	5.13
ASCD	Easy	7.25	1.13	4.88	3.63
	Hard	7.13	1.38	4.88	3.38
Framing Words	Easy	15.38	54.13	14.63	90.75
	Hard	12.13	61.50	15.25	59.50

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